

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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July 23, 2009

TO:

Parties and Intervenors

FROM:

S. Derek Phelps, Executive Director

RE:

DOCKET NO. 376 - New Cingalar Wireless PCS, LLC (AT&T) application for

a Certificate of Environmental Compatibility and Public Need for the

construction, maintenance and operation of a telecommunications facility located

at 24 Dinglebrook Lane, Newtown, Connecticut.

As stated at the hearing in Newtown on May 28, 2009, after the Council issues its draft findings of fact, parties and intervenors may identify errors or inconsistencies between the Council's draft findings of fact and the record; however, no new information, evidence, argument, or reply briefs will be considered by the Council.

Parties and Intervenors may file written comments with the Connecticut Siting Council on the Draft Findings of Fact issued on this docket by August 6, 2009.

SDP/MP/laf

Enclosure





LIST OF PARTIES AND INTERVENORS $\underline{\text{SERVICE LIST}}$

	Document	Status Holder	Representative
Status Granted	Service	(name, address & phone number)	(name, address & phone number)
Applicant	⊠ U.S. Mail	New Cingular Wireless PCS, LLC (AT&T)	Christopher B. Fisher, Esq. Cuddy &Feder LLP 445 Hamilton Avenue, 14 th Floor White Plains, NY 10601 (914) 761-1300 (914) 761-5372 fax cfisher@cuddyfeder.com AT&T
			500 Enterprise Drive Rocky Hill, CT 06067 Attention: Michele Briggs (860) 513-7700 (860) 513-7190 - fax Michele.g.briggs@att.com
Intervenor (granted on 04/07/09)	⊠ E-mail	Cellco Partnership d/b/a Verizon Wireless	Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103-3597 (860) 275-8200 (860) 275-8299 fax kbaldwin@rc.com
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DOCKET NO. 376 - New Cingular Wireless PCS, LLC (AT&T) }
application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a } telecommunications facility located at 24 Dinglebrook Lane, Newtown, Connecticut.

Council
July 10, 2009

DRAFT Findings of Fact

Introduction

- 1. New Cingular Wireless PCS, LLC (AT&T), in accordance with the provisions of Connecticut General Statutes (CGS) §§ 16-50g through 16-50aa, applied to the Connecticut Siting Council (Council) on February 13, 2009 for the construction, operation, and maintenance of a 150-foot wireless telecommunications facility located at 24 Dinglebrook Lane, Newtown, Connecticut. (AT&T 1, pp. 1-2)
- 2. AT&T is a Delaware corporation with an office in Rocky Hill, Connecticut. AT&T is licensed by the Federal Communications Commission (FCC) to construct and operate a personal wireless service system in Connecticut. (AT&T 1, p. 2)
- 3. The party in this proceeding is the applicant. The intervenor in this proceeding is Cellco Partnership d/b/a Verizon Wireless (Cellco). (Transcript 1 05/28/09, 3:15 p.m. [Tr. 1], p. 6)
- 4. The purpose of the proposed facility is to provide wireless service for AT&T to northern Newtown, eastern Brookfield, southern Bridgewater, portions of Southbury, and other local roads and adjacent areas. (AT&T 1, p. 1)
- 5. Pursuant to CGS § 16-50m, the Council, after giving due notice thereof, held a public hearing on May 28, 2009, beginning at 3:15 p.m. and continuing at 7:00 p.m. at the Edmond Town Hall, 45 Main Street, Newtown, Connecticut. (Council's Hearing Notice dated April 14, 2009; Tr. 1, p. 3; Transcript 2-05/28/09, 7:00 p.m. [Tr. 2], p. 3)
- 6. The Council and its staff conducted an inspection of the proposed site on May 28, 2009, beginning at 2:00 p.m. The applicant flew a red four-foot diameter balloon at the site from 11:30 a.m. to 7:00 p.m. to simulate the height of the proposed tower. Winds were calm until about 1:15 p.m. when they reached 7 to 10 miles per hour. Visibility conditions due to the weather ranged from one-half mile to one and one-quarter miles. Overall, the balloon remained erect and its planned height of 150 feet above ground level (agl). (Council's Hearing Notice dated April 14, 2009; Tr. 1, pp. 11-12)
- 7. Notice of the application was provided to all abutting property owners by certified mail. Public notice of the application was published in the <u>Newtown Bee</u>. (AT&T 1, pp. 3-4 and Tab 9)
- 8. AT&T installed a four-foot by six-foot sign describing the proposed project at the entrance to the site property driveway along 24 Dinglebrook Lane on or about May 14, 2009. The sign contained the required hearing and contact information. (Tr. 1, p. 12)
- 9. Pursuant to CGS § 16-50l(b), AT&T provided notice to all federal, state and local officials and agencies listed therein. (AT&T 1, Tab 8)

State Agency Comment

- 10. Pursuant to General Statutes § 16-50j(h), on April 14, 2009 and June 1, 2009, the following State agencies were solicited to submit written comments regarding the proposed facility: Department of Environmental Protection (DEP), Department of Agriculture (DOAG), Department of Public Health (DPH), Council on Environmental Quality (CEQ), Department of Public Utility Control (DPUC), Office of Policy and Management (OPM), Department of Economic and Community Development (DECD), and the Department of Transportation (DOT). (Record)
- 11. The Council received a written response from the DOT's Bureau of Engineering and Highway Operations on May 11, 2009, stating that the DOT has no comment. (Record)
- 12. The Council received a written response from the DPH Drinking Water Section on May 5, 2009, stating that the DPH has no comment. (Record)
- 13. No responses were received from the DEP, DOAG, CEQ, DPUC, OPM, or DECD. (Record)

Municipal Consultation

- 14. AT&T filed a technical report with the Town of Newtown (Town) on November 3, 2008. AT&T sent correspondence to the town on November 3, 2008, that stated AT&T would offer free space on the tower for emergency communications equipment. The town responded by indicating that there is a coverage gap in the Town's emergency radio service network and they were interested in placing equipment at the site in the future. (AT&T 1, pp. 7 and Tab 8)
- 15. Newtown First Selectman Joseph Borst provided a limited appearance statement to the Council on May 28, 2009. Mr. Borst believes that the proposed tower complies with local zoning regulations. However, he prefers that the tower be located in the Paugussett State Forest if possible and would like the Council to confirm whether or not it is possible to do so. Mr. Borst also notes that a tower is needed for public safety purposes, including the needs of the Town police, fire, and ambulance services. Lastly, Mr. Borst would like the Council to verify the need for the tower to be 150 feet tall and to see if a shorter tower is feasible. (Town of Newtown limited appearance statement of May 28, 2009)

Public Need for Service

- 16. In 1996, the United States Congress recognized a nationwide need for high quality wireless telecommunications services, including cellular telephone service. Through the Federal Telecommunications Act of 1996, Congress seeks to promote competition, encourage technical innovations, and foster lower prices for telecommunications services. (Council Administrative Notice Item No. 7)
- 17. In issuing cellular licenses, the Federal government has preempted the determination of public need for cellular service by the states, and has established design standards to ensure technical integrity and nationwide compatibility among all systems. (Council Administrative Notice Item No. 7)
- 18. The Telecommunications Act of 1996 prohibits local and state entities from discriminating among providers of functionally equivalent services. (Council Administrative Notice Item No. 7)

- 19. The Telecommunications Act of 1996, a Federal law passed by the United States Congress, prohibits any state or local entity from regulating telecommunications towers on the basis of the environmental effects of radio frequency emissions to the extent that such towers and equipment comply with FCC's regulations concerning such emissions. This Act also blocks the Council from prohibiting or acting with the effect of prohibiting the provision of personal wireless service. (Council Administrative Notice Item No. 7)
- 20. In an effort to ensure the benefits of wireless technologies to all Americans, Congress enacted the Wireless Communications and Public Safety Act of 1999. The purpose of this legislation was to promote public safety through the deployment of a seamless, nationwide emergency communications infrastructure that includes wireless communications services. (AT&T 1, pp. 5-6)
- 21. AT&T would be able to provide enhanced 911 services to the target service area. (AT&T 1, pp. 5-6)

Site Selection

- 22. AT&T established a search ring for the target service area on October 16, 2005. The actual search area was shifted due to its location in the Paugusset State Forest and AT&T's understanding that the Department of Environmental Protection has a standing policy of not allowing telecommunications towers on public forest lands. The search included identification of potential structures that could be used for telecommunications purposes, discussion with town officials regarding suitable land for development and the examination of town records to identify potential telecommunications sites. (AT&T 1, Tab 1; AT&T 2, response 4)
- 23. The revised search ring is centered in the southern portion of the Paugusset State Forest and is located just north of Sanford Road. The search ring is elliptical and is approximately 0.94 miles wide from east to west and 0.97 miles wide measured north to south. (AT&T 1, Tab 2)
- 24. The nearest existing tower facility to the proposed site is a 180-foot self-supporting lattice tower located at 20 Barnabas Road, Newtown, approximately 2.75 miles south of the proposed site. AT&T is located at the 135-foot level of this facility; coverage does not extend to the target service area. (AT&T 1, Tab 1; Council Administrative Notice Item No. 13)
- 25. AT&T did not identify any structures suitable to provide coverage to the target service area. (AT&T 1, pp. 6-7; Council Administrative Notice Item No. 13)
- 26. After determining there were no viable structures within the search area, AT&T searched for properties suitable for tower development. AT&T investigated raw land sites and found that the predominant land uses in the target area are single-family residential. There are no known townowned or commercial properties in the target area. In addition, the only site that AT&T could secure a lease is at the subject property on 24 Dinglebrook Lane, Newtown. (AT&T 1, p. 7 and Tab 2)
- 27. Other sites would require constructing the tower at a recreational area such as state or town forests, the Shepaug Recreational Area, and the George Waldo State Park. (AT&T 1, p. 7)

Site Description

- 28. The proposed facility is located on a 24.7-acre parcel owned by Paul R. Lundgren at 24 Dinglebrook Lane in Newtown (refer to Figure 1). The property is developed with an existing residence. (AT&T 1, p. 2 and Tab 3)
- 29. The parcel is zoned Residential (R-2). (AT&T 1, p. 9)
- 30. The tower site is located in the central portion of the property. (AT&T 1, Tab 3)
- 31. AT&T proposes to construct a 150-foot self-supporting monopole at the site in a level, semi-open area. (AT&T 1, Tab 3)
- 32. The tower would be designed to meet EIA/TIA-222-F structural standards. The tower would be designed to support a total of three levels of carriers' antennas (including AT&T) plus the Town's emergency communication antennas. (Tr. 1, p. 13; AT&T 1 p. 8)
- 33. AT&T proposes to construct a 50-foot by 75-foot equipment compound within a 70-foot by 100-foot lease area at the base of the tower, sufficient space to accommodate four telecommunication carriers. The compound would be enclosed by an eight-foot high chain link fence. (AT&T 1, p.8 and Tab 3)
- 34. Access to the compound would be via an existing 210-foot gravel drive from Dinglebrook Lane. This gravel access drive would be extended 360 feet to reach the proposed equipment compound. (AT&T 1, p.8 and Tab 3)
- 35. Utilities would run overhead for approximately 190 feet from existing pole #4950 on Dinglebrook Lane to existing pole #5280 on the subject property. The utilities would continue underground for approximately 230 feet to reach the access drive, and then would follow the access drive for the remaining distance to reach the proposed equipment compound. (AT&T 1, Tab 3)
- 36. AT&T proposes to install six panel antennas on a low-profile platform at a centerline height of 150 feet agl. The total height with AT&T's antennas would be approximately 152 foot 6 inches. (AT&T 1, p. 2; Tr. 1, 17)
- 37. AT&T could use T-arm mounts with no degradation of signal. However, a flush-mount configuration can only hold three antennas and thus would require two levels of antennas. This would result in an additional 10 feet of tower height if the antennas were flush-mounted. (AT&T 1, response 9)
- 38. Cellco proposes to install six cellular, six PCS and three 700 MHz panel antennas on a low-profile platform at the 140-foot level of the proposed tower. (Cellco 1, response 6)
- 39. Cellco could use T-arms if necessary, but would prefer a low-profile platform for easier maintenance of the antennas. (Cellco 1, response 8)
- 40. Cellco would require three levels of antennas if such antennas were flush-mounted. Additional tower height would be necessary also. (Cellco 1, response 8)
- 41. AT&T proposes to install an 11-foot 6-inch by 20-foot equipment shelter within the compound. A 4-foot by 11-foot concrete pad to accommodate a backup propane or diesel generator would also be installed within the compound. (AT&T 1, Tab 3; Tr. 1, p. 26)

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- 42. The backup generator would have a fuel tank of sufficient size to provide up to four to five days depending on the load. (Tr. 1, p. 26)
- 43. Cellco proposes to install a 12-foot by 30-foot equipment shelter within the compound. A battery backup system and a diesel generator would be located inside the equipment shelter. (Cellco 1, response 7)
- 44. The battery backup system would have an approximately eight-hour run time. (Tr. 1, p. 62)
- 45. The tower radius would be contained within the site property. (AT&T 1, Tab 3)
- 46. The nearest off-site residence to the proposed tower site is approximately 542 feet to the northwest, owned by Anna Finnegan, located at 2 Driftway Drive. (AT&T 1, Tab 3; AT&T 2, response 7)
- 47. There are 36 residences within 1,000 feet of the tower site. (AT&T 1, Tab 3)
- 48. Surrounding land use includes low-density single family residential homes and open space. (AT&T 1, p. 16)
- 49. The tower site is located at an elevation of 438 feet above mean sea level (amsl). Surrounding terrain ranges in elevation from 190 feet amsl to over 700 feet amsl. (AT&T 1, Tab 3)
- 50. The estimated construction cost of the facility, not including AT&T's antennas and radio equipment is:

 Tower and foundation
 \$200,000.

 Site development
 \$ 70,000.

 Utilities
 \$ 50,000.

Total estimated cost (AT&T 1, p. 18)

\$320,000.

Environmental Concerns

- 51. The proposed facility would have no effect upon historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places or upon properties of traditional cultural importance to Connecticut's Native American community. (AT&T 1, Tab 7)
- 52. The site is not within any designated area indicating the presence of Federally threatened or endangered species or State endangered, threatened or special concern species. (AT&T 1, p. 10 and Tab 5)
- 53. A total of 39 trees with a diameter greater than six inches breast height would be removed during the development of the proposed access road and compound at the proposed site. (AT&T 2, response 11)
- 54. The nearest wetland is associated with a small pond located approximately 15 feet north of the proposed access drive location. The pond was created by a previous property owner approximately 1967. (AT&T 1, Tab 3; Tr. 1, p. 43)
- 55. The proposed access drive can be relocated to provide a 50-foot separation between the access drive and wetland. (Tr. 2, 12)

- 56. The amount of cut required to develop the proposed tower site and access drive will be approximately 10 cubic yards. The amount of fill would be approximately 2 cubic yards. (AT&T 2, response 12)
- 57. Aircraft hazard obstruction marking or lighting of the tower is not required or proposed. (AT&T 1, p. 11 and Tab 3)
- 58. The cumulative maximum power density from the radio frequency emissions of the proposed AT&T antennas is calculated to be approximately 5.93 percent of the standard for Maximum Permissible Exposure, as adopted by the FCC, at the base of the proposed tower. Cellco's antennas result in maximum worst-case power density of approximately 23.9 percent. The total cumulative maximum worst-case power density would be 29.8 percent of the FCC limit. This calculation was based on methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997) that assumes all antennas would be pointed at the base of the tower and all channels would be operating simultaneously. (AT&T 1, p. 11)
- 59. AT&T's and Cellco's backup generators, would have double-walled fuel tanks to protect against spillage. (Tr. 1, p. 27 and 62)
- 60. AT&T's and Cellco's backup generators would meet all applicable noise standards. (Tr. 1, pp. 27 and 63)

Visibility

61. Visibility of the proposed tower from specific locations within a two-mile radius of the site is as follows:

Specific Location and Area Receptors	Visible	Approximate Portion of Tower Visible	Approx. Distance to Tower
1. Lake Lillinonah, looking southeast	Yes	15 feet – above trees	1.0 miles southeast
2. Lake Lillinonah, looking southwest	Yes	10 feet – above trees	0.47 miles southeast
3. Lake Lillinonah, looking southwest	Yes	35 feet – above trees	0.47 miles southwest
4. Lake Lillinonah, looking southwest	Yes	35 feet – above trees	0.63 miles west
5. Butterfield Road, adjacent to house #49, looking north	No	Tower not visible	1.5 miles northwest
6. Parmalee Hill Road, looking north	No	Tower not visible	1.69 miles north
7. Intersection of Hanover Bridge and Sycamore Lane, looking southeast	No	Tower not visible	0.2 miles southeast
8. Lillinonah Trail (CT Blue Blaze), looking southwest	No	Tower not visible	0.6 miles southwest
9. Lake Lillinonah, looking southeast	No	Tower not visible	1.13 miles southeast
10. Lake Lillinonah at DEP Boat Launch area, looking southeast	No	Tower not visible	1.26 miles southeast

(AT&T 1, Tab 4, Photosimulations)

- 62. The proposed tower would be visible year-round from approximately 206 acres within two-miles of the proposed site (refer to Figure 3). Of the 206 acres, 190 acres would be on the Housatonic River / Lake Lillinonah. The tower would be seasonally visible from an additional 9 acres. (AT&T 1, Tab 4, Viewshed Analysis)
- 63. The tower would be seasonally visible from a 0.15 miles long section of the Lillinonah Trail (CT Blue Blaze) located at the northwest corner of the Paugusset State Forest. (AT&T 1, Tab 4; Viewshed Analysis)
- 64. The tower would not be visible from any state or locally designated scenic roads. The nearest scenic road is 1.6 miles to the southeast of the proposed tower.(AT&T 1, Tab 4; AT&T 2, Q. 7)
- 65. AT&T considered alternative "stealth" tower designs, but did not pursue such designs. AT&T notes that a monopine may be more visible above the treeline. A brown stick design may be less visually obtrusive at close distances, but would not accommodate the platform mounts that AT&T and Cellco seek. (Tr. 1, pp. 14-16)

AT&T - Existing and Proposed Wireless Coverage

- 66. AT&T operates in both the cellular (800 MHz) and PCS (1900 MHz) frequency bands. However, initially, the proposed AT&T antennas at this site would only operate in the cellular band. AT&T considers -74dBm or better to be its minimum signal level, sufficient for in-building coverage. A signal level of -82 dBm is AT&T's target for in-vehicle coverage. (AT&T 1, Tab 3; AT&T 2, responses 2 and 3; Tr. 1, p. 34.)
- 67. AT&T has existing signal levels in the vicinity of the proposed tower ranging between -82 dBm and -150 dBm. The largest portion of this area has a signal level ranging between -92 dBm and -150 dBm. (AT&T 2, response 1)
- 68. Installing antennas at 150 feet agl would provide approximately 0.45 miles and 2.6 miles of reliable cellular coverage to Route 133 and Dinglebrook Lane, respectively. (AT&T 2, response 10)
- 69. The site would provide a cellular coverage footprint of 12.45 square miles with an antenna height of 150 feet. (Tr. 1, p. 26)
- 70. Reducing the antenna height to 140 or 130 feet agl would cause of loss of coverage just north of Interstate 84. (Tr. 1, p. 35)
- 71. At an antenna height of 140 feet agl, the coverage footprint would be reduced to 11.86 square miles. (Tr. 1, p. 35)
- 72. At an antenna height of 130 feet agl, the coverage footprint would be reduced to 11.3 square miles. (Tr. 1, p. 35)

Cellco - Existing and Proposed Wireless Coverage

- 73. Cellco seeks to operates in the cellular (850 MHz), PCS (1900 MHz), and 700 MHz frequency bands at this proposed tower site. Cellco considers -75dBm or better to be its minimum signal level, sufficient for in-building coverage. A signal level of -85 dBm is Cellco's target for in-vehicle coverage. (Cellco 1, responses 1 and 3)
- 74. Cellco has existing signal levels in the vicinity of the proposed tower ranging between -95 dBm and 120 dBm at cellular frequencies and from -100 dBm to -120 dBm at PCS frequencies. Cellco is not currently providing 700 MHz service in Connecticut. (Cellco 2, response 2)
- 75. Installing antennas at the 140 feet agl would provide reliable cellular coverage of approximately 1.8 miles and 0.84 miles of reliable coverage to Route 133 and Dinglebrook Lane, respectively. (AT&T 2, response 10)
- 76. Installing antennas at the 140 feet agl would provide reliable PCS coverage of approximately 0.39 miles and 0.77 miles of reliable coverage to Route 133 and Dinglebrook Lane, respectively. (AT&T 2, response 10)
- 77. The site would provide a cellular coverage footprint of 11.4 square miles and a PCS coverage footprint of 3.8 square miles with an antenna height of 140 feet. (Tr. 1, p. 26)
- 78. Cellco has a search ring to investigate future coverage for Route 25 and additional portions of Route 133. (Tr. 1, p. 64)

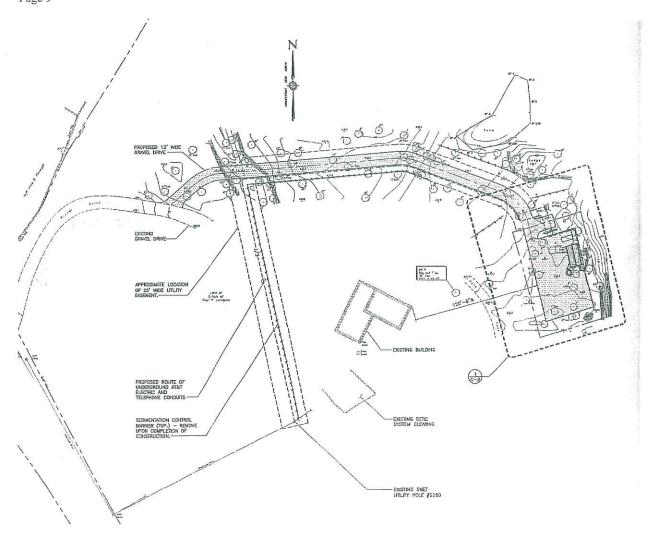


Figure 1: Location of site at 24 Dinglebrook Lane, Newtown. (AT&T 1, Tab 3)

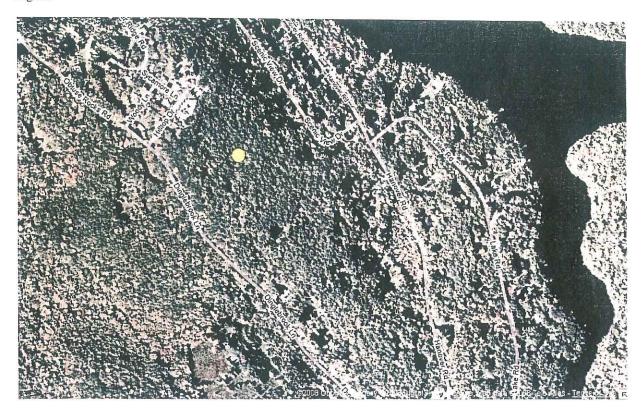
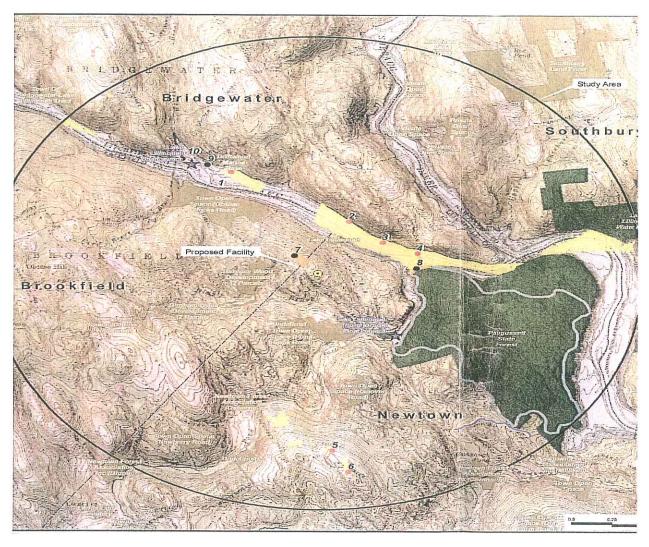


Figure 2: Location of site at 24 Dinglebrook Lane, Newtown (AT&T 1, Tab 3)



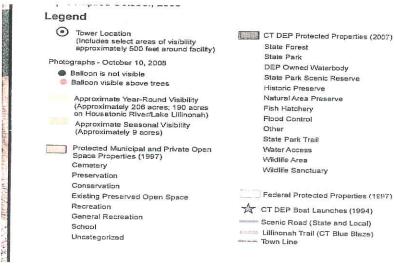


Figure 3: Projected visibility of proposed site. (AT&T 1, Tab 4)

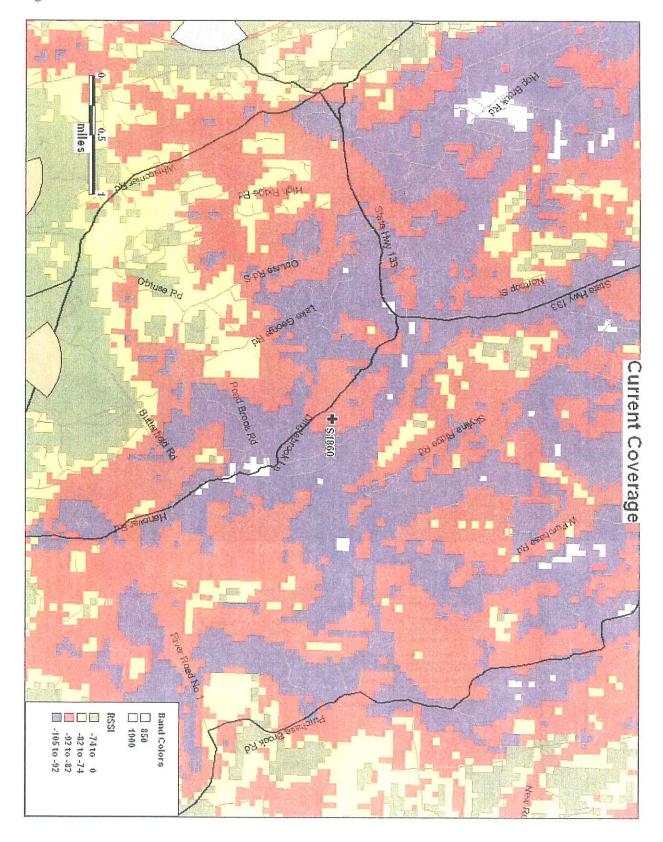


Figure 4: AT&T existing cellular coverage. (AT&T 2, response 10)

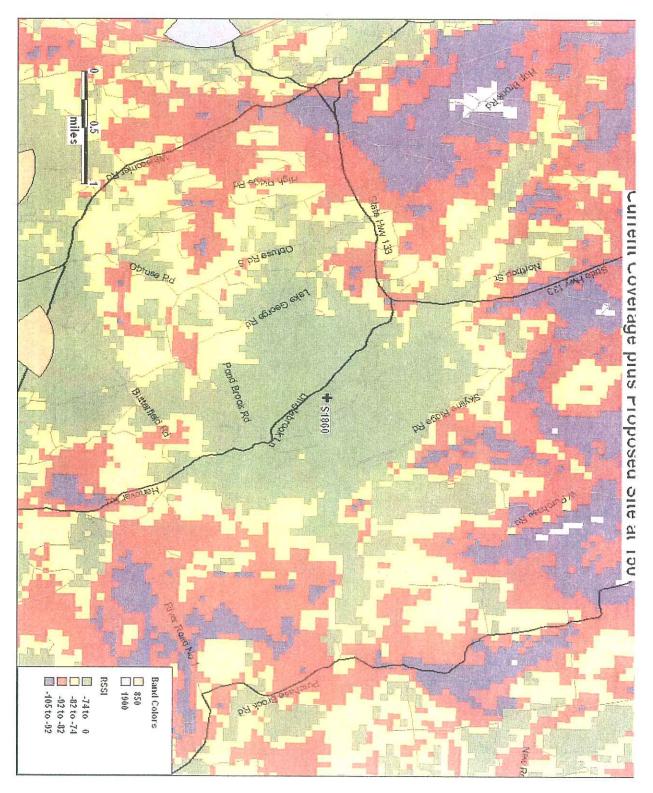


Figure 5: AT&T proposed cellular coverage with antennas mounted at 150 feet agl. (AT&T 2, response 10)

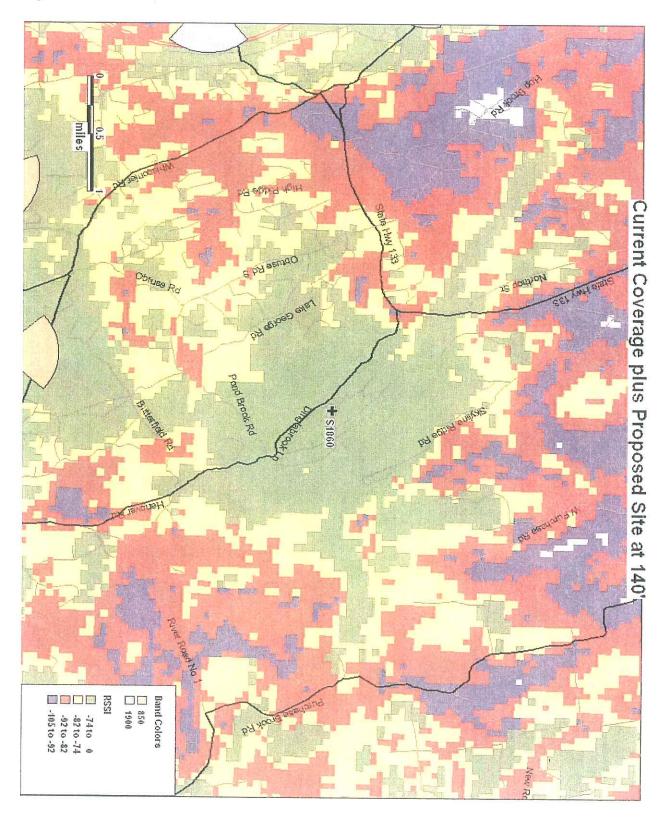


Figure 6: AT&T proposed cellular coverage with antennas mounted at 140 feet agl. (AT&T 2, response 10)

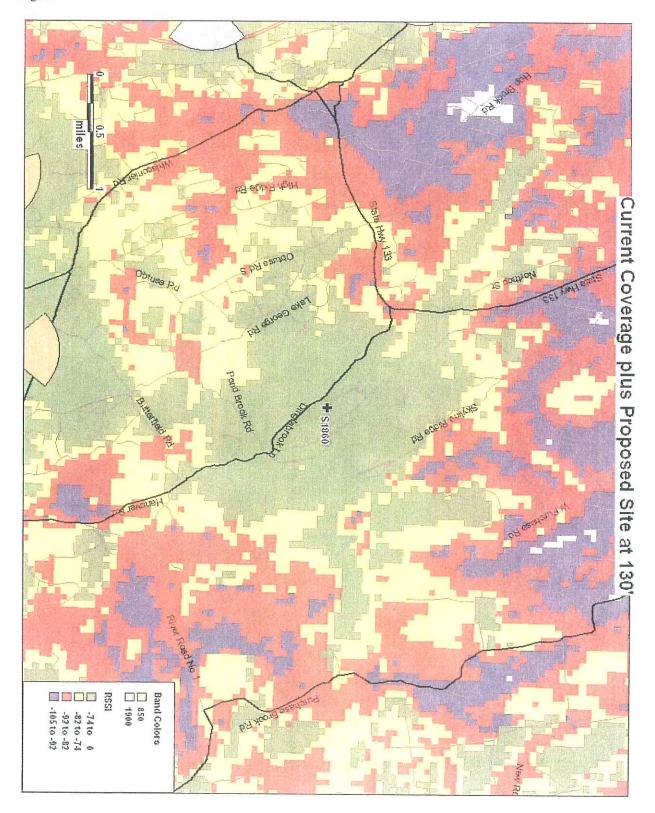


Figure 7: AT&T proposed cellular coverage with antennas mounted at 130 feet agl. (AT&T 2, response 10)



Figure 8: Cellco's Existing Cellular Coverage. (Cellco 1, response 9)

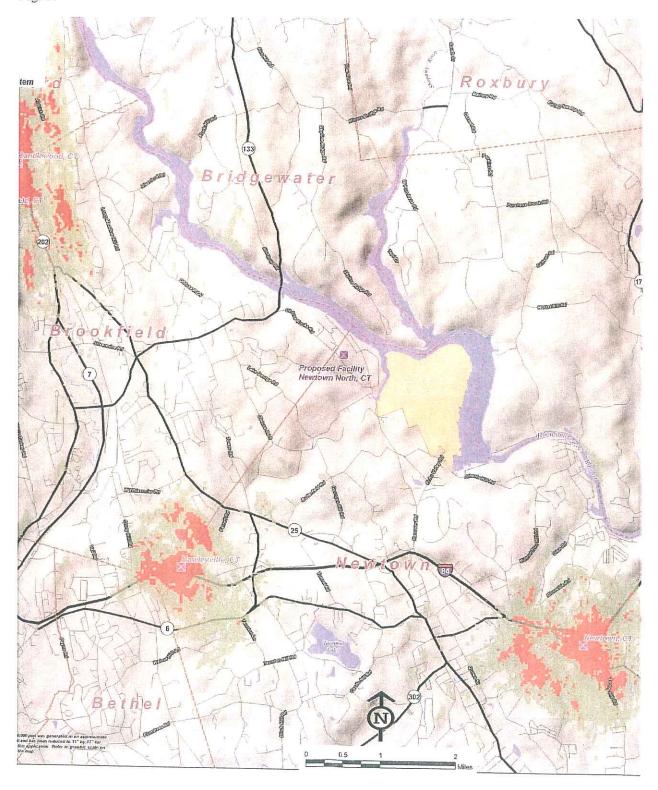


Figure 9: Cellco's Existing PCS Coverage. (Cellco 1, response 9)



Figure 10: Cellco's Proposed Cellular Coverage at 140 feet. (Cellco 1, response 10)



Figure 11: Cellco's Proposed PCS Coverage at 140 feet. (Cellco 1, response 10)

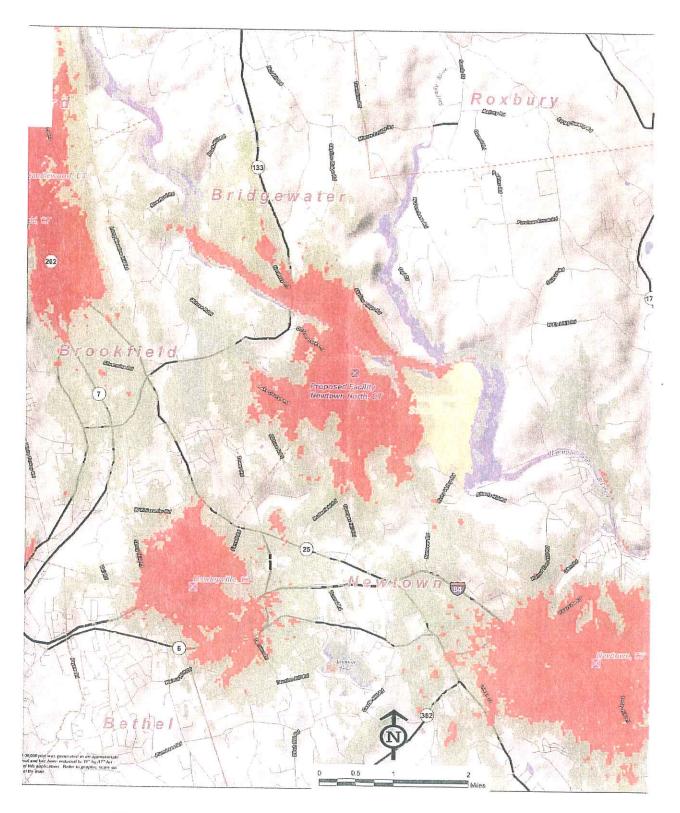


Figure 12: Cellco's Celluar Coverage at 130 feet. (Cellco 1, response 10)

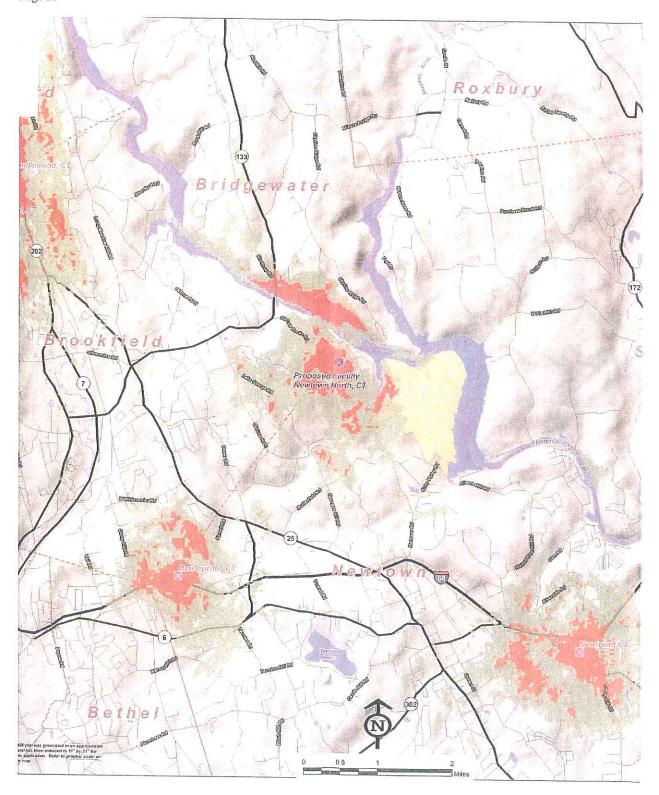


Figure 13: Cellco's PCS Coverage at 130 feet. (Cellco 1, response 10)

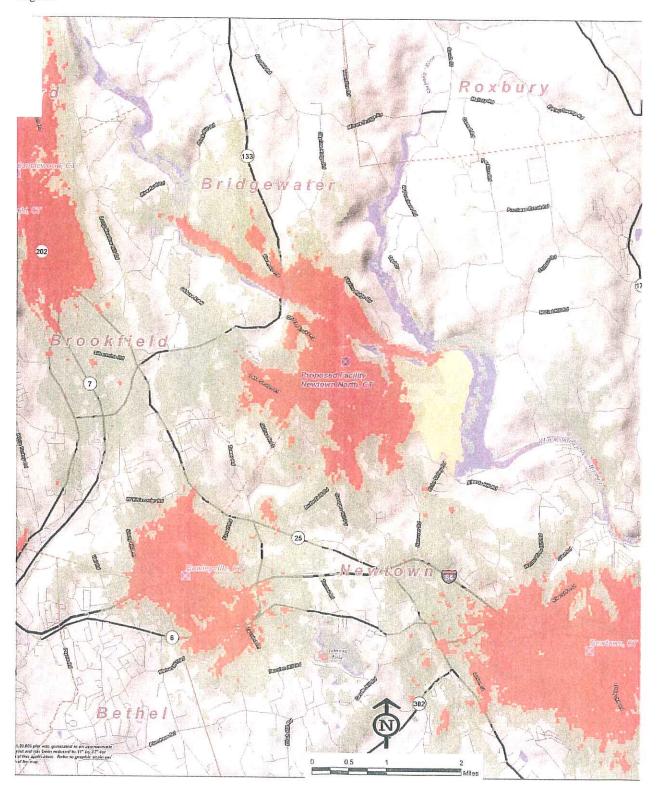


Figure 14: Cellco's Cellular Coverage at 120 feet. (Cellco 1, response 10)

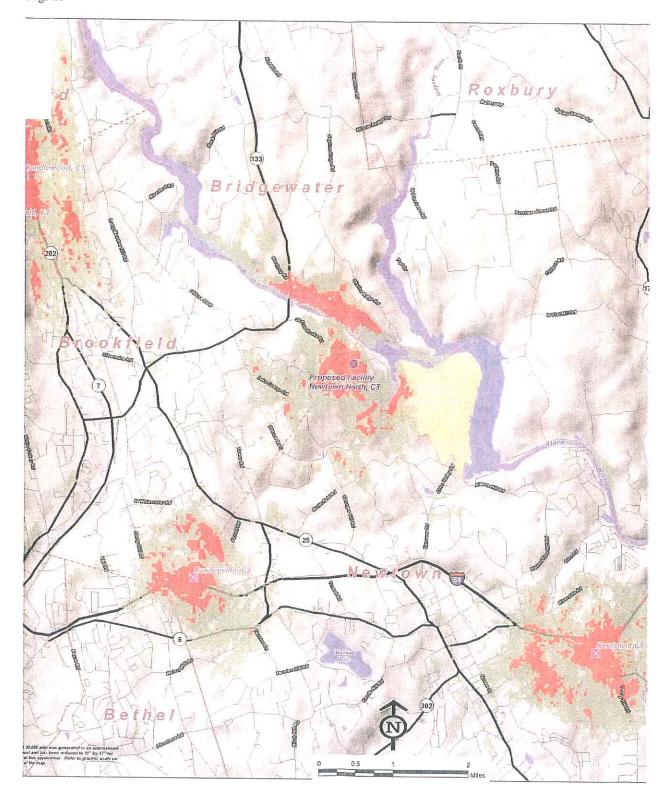


Figure 15: Cellco's PCS Coverage at 120 feet. (Cellco 1, response 10)

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